

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/841,644	04/30/1997	SHUNPEI YAMAZAKI	0756-1603	3399
7590 10/25/2004			EXAMINER	
Eric J. Robinson			SCHILLINGER, LAURA M	
Robinson Intelle	ctual Property Law Office			
21010 Southbank Street			ART UNIT	PAPER NUMBER
PMB 955			2813	
Potomac Falls, VA 20165			DATE MAILED: 10/25/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•	08/841,644	YAMAZAKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Laura M Schillinger	2813				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	B6(a). In no event, however, may a re within the statutory minimum of thirty rill apply and will expire SIX (6) MONT cause the application to become ABA	ply be timely filed (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 14 A	August 2001 .					
2a)☐ This action is FINAL . 2b)☑ Thi	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4) ☐ Claim(s) 23-32 is/are pending in the applicatio	n.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>2332</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.	•				
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the prior application from the International Bu * See the attached detailed Office action for a list 	reau (PCT Rule 17.2(a)).					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domest 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of I	Summary (PTO-413) Paper No(s) nformal Patent Application (PTO-152) .				

*Application/Control Number: 08/841,644

Art Unit: 2813

DETAILED ACTION

This Office Action is in response to Amendment B, dated 4/30/97, in Paper No. 3.

Claim Rejections - 35 USC § 112

Claims 23-32 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 23 recites:

A method of manufacturing an active matrix panel in which data signals are supplied to a liquid crystal layers through a plurality of thin film transistors arranged in a matrix of pixels, gate lines and data lines being coupled to each thin film transistor, said method comprising:

Forming a semiconductor layer on a substrate;

Forming a gate insulating film on the semiconductor layer,

Forming a gate electrode above the gate insulating film and gate line in electrical contact with the gate electrode;

Forming a source region and a drain region in the semiconductor layer by adding impurities thereto as donors or acceptors using the gate electrode as a self alignment mask;

Simultaneously forming an overlying gate insulator on a top and sidewalls of the gate electrode and the gate line by anodic oxidation of the gate electrode and the gate line to

Application/Control Number: 08/841,644

Art Unit: 2813

reduce the dimensions of the gate electrode and the gate line and simultaneously form a lateral offset, ΔL , from the source region and the drain region to the sidewalls of the gate electrode; and

Forming a data line in electrical contact with the source region and crossing over the gate line at a cross-over location, wherein the overlying gate insulator is located between the data line and the gate line at the cross-over location to insulate the data line from the gate line.

Applicant's specification fails to disclose and therefore does not enable a simultaneous anodic oxidation of a gate electrode and a gate line, Applicant's specification refers to a common gate wire and a gate wiring- however does not teach to implement anodic oxidation on either structure, let alone do so simultaneously with the gate electrode. Further, Applicant's disclosure fails to enable a "data line", let alone a data line in electrical contact with a source region which crosses over a gate line at a cross-over location. Applicant's specification fails to disclose a "cross over location". Applicant's specification fails to disclose the formation of a gate insulator between a data line and a gate line at the cross over location. It is not possible for one of ordinary skill in the art to make Applicant's invention described in his claims based upon his disclosure because there is a total absence of teachings with respect to a data line, a gate line, and a cross over location. Consequently, Applicant's claims are rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-T, R-F 7:00-5:00.

Art Unit: 2813

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (703) 308-4940. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

LMS

08/04/04